Background

Gain-sharing was first implemented for the Plans 1 and 3 in 1998, based on certain assumptions, goals and policies. The Gain-Sharing report was originally dated August 10, 2004 and was revised August 30, 2004. The report examines the assumptions, goals and policies of gain-sharing in light of the impacts and experience of the affected plans over the five-year period since it became effective. It also explores some of the legal, technical and actuarial issues associated with gain-sharing. Finally, the report includes preliminary estimates of the cost of future gain-sharing. The report is intended as an overview as well as a tool for evaluating the gain-sharing provisions in current law.

Committee Activity

Presentations:

August 17, 2004 - Full Committee

Recommendation to Legislature

See specific tabs entitled Plan 1 Gain-Sharing and Plan 3 Gain-Sharing.

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Select Committee on Pension Policy

Gain-Sharing

(August 30, 2004)

Issue

Gain-sharing was first implemented in 1998, based on certain assumptions, goals, and policies. This issue paper examines those assumptions, goals and policies in light of the impacts and experience of gain-sharing over the last five years. This report also explores some of the legal, technical and actuarial issues associated with gain-sharing. The report is intended as an overview as well as a tool for evaluating the gain-sharing provisions in current law.

Staff

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Members Impacted

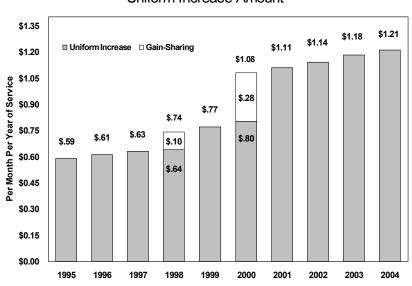
Gain-sharing directly affects retired members of TRS and PERS Plans 1. As of the most recent actuarial valuation (2002), there were 33,148 retirees in TRS 1 and 54,006 retirees in PERS 1. Gain-sharing also affects term-vested, active and retired members of the TRS, SERS and PERS Plans 3. "Term-vested" members are those who left employment, were vested, and who did not withdraw their contributions. As of the most recent actuarial valuation, TRS 3 had 2,151 term-vested members, 45,798 active members and 283 retirees; SERS 3 had 1,148 term-vested members, 26,921 active members, and 185 retirees; and PERS 3 had 198 term-vested members, 15,509 active members and 9 retirees. Plan 2 members do not participate in gainsharing.

Current Situation

Gain-sharing is a mechanism that increases benefits in PERS 1, TRS 1 and all the Plans 3 (TRS 3, SERS 3 and PERS 3). These increases are not automatic, but are contingent on the occurrence of "extraordinary investment gains." Extraordinary investment gains occur when the compound average of investment returns on pension fund assets exceeds 10% for the previous four state fiscal years. The "compound average" recognizes the affect of compound interest. (Compound interest is interest paid on previously earned interest as well as on the principal.)

When the previous four-year compound average investment return exceeds 10%, a calculation is performed to determine a dollar amount that will be distributed to eligible members. Gain-sharing calculations are currently made once each biennium with potential distributions occurring in January of even-numbered years.

Plan 1 gain-sharing is governed by Chapter 41.31 RCW. As implemented for PERS/TRS 1, an amount equal to one-half of the extraordinary investment returns is used to permanently boost the Annual Increase Amount used in calculating the Uniform Cost of Living Adjustment (COLA). The following graph illustrates how gain-sharing distributions have impacted the uniform increase amount.



PERS 1 & TRS 1
Uniform Increase Amount

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Plan 3 gain-sharing is governed by Chapter 41.31A RCW. In the Plans 3, active, retired and term-vested members are eligible for gain-sharing distributions. Distributions are made as a lump sum dollar amount that is deposited directly into member's defined contribution account based on years of service credit. The same 10% rate of return in used to determine when extraordinary gains have occurred. A second calculation is then made to determine the dollar amount to be distributed to eligible members. Eligible Plan 3 members' service is divided by all system members' service. This produces the percentage of Plan 2/3 retirement funds which can be attributed to Plan 3 members' service. The Plan 3 percentage is then multiplied by one-half of the dollar amount of extraordinary gains. The Department of Retirement Systems then deposits a fixed dollar amount per year of service to each eligible member.

Example: Plan 3 Gain-sharing Calculation for Year 2000

Gain Sharing Rate	
1995-1996	17.40%
1996-1997	20.50%
1997-1998	16.60%
1998-1999	11.90%
4 Year Average	16.56%
Gain-sharing %	6.56%
Years of Service (YOS) for Eligible Plan 3 Members	286,702.27
Years of Service for Other Members	1,518,868.57
Total YOS	1,805, 570.84
Ratio of Plan 3 to Total (rounded)	15.88%
Total Gain-Sharing Potential	\$458,990,372
Gain-sharing Plan 3	\$72,887,671
Gain-sharing per Plan 3 YOS	\$254.23

History

Legislation

Gain-sharing legislation was first passed in **1998**. At that time, the Washington State Retirement Systems had been experiencing high rates of returns on plan assets. ESHB 2491 (Chapter 340, Laws of 1998) became effective immediately and established gain-sharing for the PERS and TRS Plans 1. The first gain-sharing distribution was scheduled for July 1, 1998.

SSB 6306 (Chapter 341, Laws of 1998) established gain-sharing for the TRS and SERS Plans 3. The TRS 3 provisions took effect immediately and the SERS provisions were to become effective on September 1, 2000 with the creation of SERS. SERS members would receive retroactive gain-sharing on March 1, 2001, based upon service credit accumulated as of August 1997. A second gain-sharing calculation for SERS 3 members was scheduled for March 2001, based upon service credit accumulated as of August 1999.

HB 1023 (Chapter 223, Laws of **1999**) addressed a technical correction to TRS 3 gain-sharing provisions that had passed in the previous legislative session. The 1999 law was designed to allow most TRS 3 members who had transferred from TRS 2 to TRS 3 to receive gain-sharing distributions as intended by the legislature in 1998.

In the year **2000**, ESSB 6530 (Chapter 247, Laws of 2000) created the PERS 3 gain-sharing provisions, which were the same as had been previously provided to TRS 3 and SERS 3. PERS Plan 3 was to become effective on March 1, 2002. The first gain-sharing payment was to be made March 1, 2003, and would be equal to the gain-sharing payments made to TRS Plan 3 members in January 2000.

2003 legislation affecting gain-sharing provisions involved only certain technical corrections involving statutory cross-references. Other non-SCPP bills have been introduced to: increase the frequency of gain-sharing distributions; change the definition of "extraordinary gains" by lowering the interest rate threshold from 10% to 8%; provide for lump sum payments in lieu of Plan 1 COLA increases; distribute gain-sharing to retirees based upon a point system (1 point for each year of service credit and 2 points for each year of retirement); and apply gain-sharing to members of LEOFF Plan 2. None of the non-SCPP bills concerning gain-sharing have passed.

Historical gain-sharing

The following table summarizes past gain-sharing distributions to members of the Plans 1 and 3:

Historical Gain-sharing (Dollars in Millions)

		, ,		
Distribution Date	PERS1/TRS 1	TRS 3*	SERS 3**	PERS 3***
7/1/1998	\$290	\$28		_
1/1/2000	\$634	\$73	\$50	\$26

^{*} TRS 3 members received both 1998 and 2000 gain-sharing distributions. Payments were not retroactive.

The total dollars spent for benefit improvements in the past two gain-sharing distributions was roughly \$1.1 billion. These distributions do not include dollars allocated to shorten the amortization period for the Plans 1. Those dollars amounted to another \$290 million in 1998 and \$634 million in 2000 for a grand total of roughly \$2 billion. In 2001, however, the Plan 1 payoff date was extended back out to 2024, the same as it was prior to gain-sharing. The benefit enhancements and the adjustments to the Plan 1 amortization period are described in more detail below.

Policy Analysis

The original gain-sharing mechanism was developed within a framework of Joint Committee on Pension Policy goals. The goals for gain-sharing included:

- 1. An on-going process that is understandable, stable, and would take place with meaningful frequency.
- 2. No additional unfunded long-term liabilities.
- 3. Immediate benefit improvements funded by recent investment gains.
- 4. Future benefit improvements whenever the assets invested in the retirement trust accounts experience extraordinary gains.
- 5. An acceleration of the date for paying off the unfunded actuarial liability of PERS 1 and TRS 1.

^{**}SERS 3 members received both 1998 and 2000 gain-sharing distributions. Payments were retroactive. The total for both distributions is reflected in the 1/1/2000 row.

^{***}PERS 3 members received gain-sharing for 2000 only. Payments were retroactive.

It was also expected that funding benefit improvements when there are extraordinary investment returns gains would decrease the effect of those returns on employer contribution rates. In other words, it was expected that employer contribution rates would not flatten or be driven downward if the gains triggered benefit improvements and reductions of the Plan 1 unfunded liabilities. See Gain Sharing, Report to the Joint Committee on Pension Policy, January 13, 1998. This approach seemed to assume that future employer rates would be set in response to market forces. They would go down when markets are good, and back up when markets are bad. While legislatures may choose to set contribution rates on an ad hoc basis, there are other ways to address contribution rate-setting. See Contribution Rate Setting, July 2, 2004 Report to the SCPP by the State Actuary.

This policy analysis will compare these goals to the experience of the last five years. This section of the report will also explore some of the technical/legal and actuarial constraints that affect gain-sharing.

Goal 1: An ongoing process that is understandable, stable, and would take place with meaningful frequency.

Gain-sharing is ongoing in the sense that it is a benefit enhancement that has been built into the affected plans through the mechanism of pension plan amendments. These plan amendments require that gain-sharing distributions be made in the future whenever certain specified conditions are met. The gain-sharing provisions are, however, subject to a "no contractual right" clause. This clause states that "no member or beneficiary has a contractual right to receive this distribution not granted prior to that time." These kinds of clauses have not been tested in the Washington courts. This legal uncertainty lends an aspect of unpredictability to the gain-sharing benefit.

Gain-sharing distributions have been triggered in two instances in the last five years. The first distribution occurred on July 1, 1998. Thereafter, gain-sharing distributions were to occur on January 1st of even-numbered years, assuming that the affected plans experienced extraordinary investment returns. The second distribution was triggered for January 1, 2000. On January 1 of 2002 and 2004, there were no extraordinary investment returns available to trigger a gain-sharing distribution.

The frequency of gain-sharing in the future is tied to annual investment returns, which are unpredictable. When gain-sharing legislation was passed in 1998, it was estimated that the 10% threshold for distribution of extraordinary gains would have been exceeded in 21 of the past 34 biennia. However, the past is not necessarily a predictor of the future. While the trigger mechanism for gain-sharing is fixed, the incidence of future gain-sharing is unknown.

In summary, the frequency of future gain-sharing is:

- subject to legal uncertainty;
- unpredictable due to market fluctuations.

Goal 2: No additional unfunded long-term liabilities.

At its inception, gain-sharing was almost viewed as a "no cost" item, i.e. it would only occur when times were good, and it would simply keep employer contribution rates from going down during those good times. In addition, the law has not allowed for any adjustment to the **supplemental** contribution rate for gain-sharing. See RCW 41.45.070(7). The supplemental rate is a temporary contribution rate increase that is made to reflect the cost of benefit changes until those changes can be included in the next actuarial valuation.

The future cost of the gain-sharing benefit provisions of PERS and TRS Plans 1, and PERS, TRS and SERS Plans 3 was not reflected in the 2002 actuarial valuation. However, the actuarial certification in the 2002 Actuarial Valuation Report noted that the funding methodology and materiality of the gain-sharing provisions were under review. Such review is required by the Actuarial Standards of Practice promulgated by the American Academy of Actuaries. (See Standards 4 and 27.) These standards require that material liabilities of the plan be identified so they can be "pre-funded." The State Actuary is now identifying gain-sharing as a material liability due to the future cost associated with this benefit, and this liability will be reflected in the 2003 Actuarial Valuation.

Estimated Fiscal Impact of Future Gain-Sharing

Future gain-sharing will impact the actuarial funding of the systems by increasing the present value of benefits payable under the systems and the required actuarial contribution rates as shown below:

(Dollars in Millions)		Current	Increase	Total
Actuarial Present Value of Projected	PERS 1	\$12,715	\$504	\$13,219
Benefits	PERS 2/3	14,159	119	14,278
(The Value of the Total Commitment to	TRS 1	10,341	426	10,767
all Current Members)	TRS 2/3	4,876	344	5,220
	SERS 2/3	1,979	159	2,138
Unfunded Actuarial Accrued Liability	PERS 1	\$2,123	\$497	\$2,620
(The Portion of the Plan 1 Liability that is Amortized at 2024)	TRS 1	1,012	404	1,416
Increase in Contribution Rates: (Effective 2005)	PERS	SERS	TRS	
Employee	0.00%	0.00%	0.00%	
Employer State	0.65%	2.35%	2.01%	

Fiscal Budget Determinations

As a result of the higher required contribution rates, the increase in funding expenditures is projected to be:

(Dollars in Millions)	PERS	SERS	TRS	Total
2005-2007				
State:				
General Fund	\$19.8	\$31.7	\$122.7	\$174.2
Non-General Fund	<u>32.6</u>	0.0	0.0	32.6
Total State	\$52.4	\$31.7	\$122.7	\$206.8
Local Government	46.6	28.0	25.2	99.8
Total Employer	99.0	59.7	147.9	306.6
Total Employee	\$0.0	\$0.0	\$0.0	\$0.0
2007-2009				
State:				
General Fund	\$24.1	\$41.1	\$150.9	\$216.1
Non-General Fund	<u>39.9</u>	0.0	0.0	<u>39.9</u>
Total State	\$64.0	\$41.1	\$150.9	\$256.0
Local Government	56.7	36.4	30.9	124.0
Total Employer	120.7	77.5	181.8	380.0

(Dollars in Millions)	PERS	SERS	TRS	Total
Total Employee	\$0.0	\$0.0	\$0.0	\$0.0

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(Dollars in Millions)	PERS	SERS	TRS	Total
2005-2030				_
State:				
General Fund	\$426.5	\$912.6	\$2,857.2	\$4,196.3
Non-General	<u>703.5</u>	0.0	0.0	<u>703.5</u>
Fund				
Total State	\$1,130.0	\$912.6	\$2,857.2	\$4,899.8
Local Government	1,002.5	808.8	585.0	2,396.3
Total Employer	2,132.5	1,721.4	3,442.2	7,296.1
Total Employee	\$0.0	\$0.0	\$0.0	\$0.0

The costs presented in this estimate are based on our understanding of existing gain-sharing provisions as well as generally accepted actuarial standards of practice including the following:

- 1. Costs were developed using the same membership data, methods, assets and assumptions as those used in preparing the September 30, 2003 draft actuarial valuation report of the Retirement Systems.
- As with the costs developed in the actuarial valuation, the emerging costs of the systems will vary from
 those presented in the valuation report or any fiscal note to the extent that actual experience differs from
 that projected by the actuarial assumptions.
- 3. The funding method used for Plan 1 utilizes the Plan 2/3 employer/state rate as the Normal Cost and amortizes the remaining liability (UAAL) by the year 2024. Benefit increases to Plan 2/3 will change the UAAL in Plan 1. The cost of benefit increases to Plan 1 increases the UAAL.
- Plan 2/3 utilizes the Aggregate Funding Method. The cost of Plan 2/3 is spread over the average working lifetime of the current active Plan 2/3 members.
- 5. The employee/employer level of cost-sharing as defined in the actuarial funding chapter Chapter 41.45 RCW provides that the cost of Plan 3 benefit enhancements is shared equally among Plan 2/3 employers and Plan 2 employees.

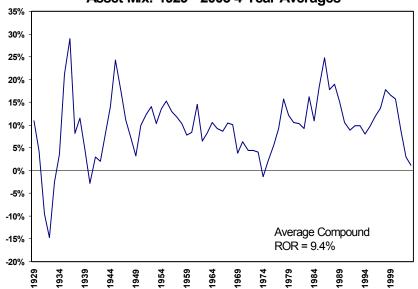
Under current law, extraordinary gains are determined every other year, and an amount equal to one-half of the extraordinary gains is distributed for benefit improvements. However, proposals have been made to increase the amount and frequency of gain-sharing. The estimated cost of reserving all of the extraordinary gains for benefit improvements can be illustrated by the following charts, which show the effects on investment returns. The first graph shows the 4-year average compound rate of return (ROR) using today's retirement plan asset mix as spread over the 1929 to 2003 period, which yields a 9.4% rate of return. (Currently, the assumed actuarial rate of return is 8%.)* The second graph shows the 4-year average compound rate of return using the same asset mix over the same period, but with all of the extraordinary gains being allocated to benefit improvements. The full appropriation of extraordinary gains lowers the rate of return from approximately 9.4% to 7.2%.**

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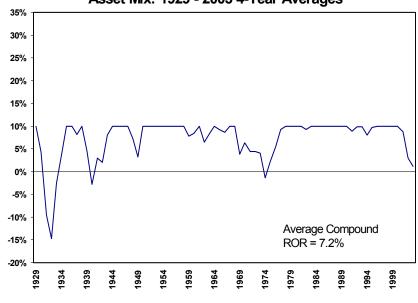
^{*}The graphs on page 10 are for illustrative purposes only. It is not appropriate to use them for setting the assumed investment rate of return for purposes of the actuarial valuation. For additional information on setting the assumed investment rate of return, see letter from the State Actuary to the Pension Funding Council dated May 25, 2004.

^{**} The graphs on page 10 are for illustrative purposes only and were not used to develop the estimated fiscal impacts of future gain-sharing.





Investment Rate of Return by Current Asset Mix: 1929 - 2003 4-Year Averages



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The second graph illustrates the scenario in which the "peaks" of investment returns (i.e. those in excess of 10%) have been "skimmed." The average compound rate of return is lowered because the peaks are no longer available to offset the "valleys" or low periods of investment returns. The valleys remain the same, while the peaks are "lopped off." This pattern could change depending on the asset allocation policy of the Washington State Investment Board. For example, if allocations to certain high-volatility asset classes such as public and private equity were reduced in the portfolio, there could be fewer instances of "extraordinary gains."

An original goal of gain-sharing was "no additional unfunded liabilities." However due to the fact that future gain-sharing distributions have not been pre-funded, gain-sharing has significantly increased the unfunded long-term liabilities of the affected plans.

Goal 3: Immediate benefit improvements funded by recent investment gains.

The gain-sharing legislation for the Plans 1 became effective immediately and thus resulted in immediate benefit improvements. The first gain-sharing distribution in 1998 provided a \$.10 increase in the Annual Increase Amount used to calculate the Uniform COLA. The Uniform COLA provides a cost-of-living adjustment to Plan 1 retirees beginning at age 66 based on the retiree's service credit. The Uniform COLA began in 1995 at \$.59 per month per year of service credit and increases 3% annually. When gain-sharing was passed in 1998, the Uniform COLA was at \$.63 per month per year of service. The \$.10 increase was permanent and is part of the base for determining the regular annual increases.

The 1998 gain-sharing distribution also paid the actuarial present value (using a one-time payment) of a retroactive "pop-up" benefit for retirees who retired prior to 1996 and elected a survivor benefit. The "pop-up" provided that if the retiree is predeceased by the beneficiary, the retiree's benefit is restored to its unreduced level at the beginning of the month following the death of the beneficiary. Those retirees who had already been predeceased by their beneficiaries had their benefits restored on the effective date of the act (July 1, 1998). The one-time cost of providing this benefit was \$52 million.

The 1998 gain-sharing distribution to Plan 3 members was \$134.43 per year of service credit. The gain-sharing amounts were distributed as lump sums deposited into Plan 3 members' defined contribution accounts.

Were these benefit improvements "funded by" recent investment gains? As explained when gain-sharing was first proposed, there are two primary methods for funding benefit improvements: a contribution rate increase, or a present-value payment. A contribution rate increase pays off the cost of the new benefit over time. A present-value payment is a one-time payment into the retirement system to cover all the estimated future costs of the benefit.

Past gain-sharing distributions resulted in transfers from the retirement trust accounts to individual members. Significant dollars were paid out of the retirement system. Past gain-sharing benefits were paid for in the sense that employer contribution rates stayed at a higher level than they would have absent gain-sharing. However no mechanism was established to pay for future gain-sharing. Many have assumed that the "extraordinary gains" somehow pay for the benefits. However "extraordinary gains" are simply the market events that triggered the timing of benefit improvements. Their long-term cost must be funded by either higher contribution rates or appropriations of new money into the retirement system.

In thinking about the fact that gain-sharing itself is not a funding mechanism for future benefit improvements, it may be useful to compare extraordinary investment gains with actuarial gains. Actuarial gains are generated by favorable plan experience. In other words, when a retirement plan is funded based on certain assumptions (including the assumed rate of investment return and various demographic assumptions) that are too conservative, it is more likely that the long-term plan experience will be more favorable than the assumptions. Favorable plan experience generates actuarial gains.

When assumptions are not conservative enough, there is less opportunity for favorable plan experience. Without favorable plan experience, there are no gains and there may even be increases in liability. Generally, actuarial assumptions are periodically adjusted to be as consistent as possible with plan experience. Thus, overall, actuarial gains are used to offset actuarial losses, just as investment gains offset investment losses.

When benefit enhancements are funded indirectly though temporary gains and not directly through increased contribution rates or one-time pay-outs, then those gains are no longer available in the future to offset losses. In effect, it is as if the gains have been capped. The approach leads to increased future liabilities. This is not to say that retirement plans never have surpluses which can be used for reasonable benefits enhancements. However, an asset surplus is not the same as a prolonged stock market surge. An asset surplus occurs when all liabilities have been satisfied and there is still money left over. This is not the case in the Plans 1 or the Plans 3; thus benefit improvements still require a funding mechanism that is related to their cost.

In summary, in accordance with its original goals, gain-sharing generated significant immediate benefit improvements upon passage of the initial legislation. Those enhancements, however, were not funded by recent investment gains; rather, the benefit improvements were funded by employer contributions. Similarly, future benefit enhancements that are triggered by gain-sharing events will require additional funding in order to avoid future increases in plan liabilities.

Goal 4: Future benefit improvements whenever the assets invested in the retirement trust accounts experience extraordinary gains.

Looking at the future from the perspective of the Joint Committee on Pension Policy in 1998, we see that the 2000 gain-sharing distribution was much larger than the 1998 distribution. It provided a second permanent increase in the Uniform COLA amount for TRS 1 and PERS 1 of \$.28 as of January 1, 2000. Eligible members of the Plans 3 received \$254.23 per year of service credit as lump sums deposited into their defined contribution. There were no gain-sharing distributions in 2002 or 2004.

As mentioned before, while the trigger mechanism for gain-sharing is fixed, the incidence of future gain-sharing is unknown. Also, as explained earlier, while gain-sharing provisions trigger certain future benefit payments according to a pre-determined formula that varies with the size of the investment gains, there is no official funding mechanism provided to pay for the resulting benefit improvements that will occur. It is simply assumed that a) gain-sharing will only occur when contribution rates are otherwise decreasing, and b) the distributions will result in employer contribution rates remaining at a higher level than they would have been absent gain-sharing.

Goal 5: An acceleration of the date for paying off the unfunded actuarial liability of PERS Plan 1 and TRS Plan 1.

Accelerating the date for paying off the unfunded actuarial accrued liability (UAAL) has an effect on contribution rates. When the amortization period for plan liabilities is shortened, contribution rates must be higher. When the amortization period is lengthened, contribution rates can be lower. This is similar to a mortgage payment, in that a shorter mortgage period means a higher monthly payment and a longer mortgage period means a lower monthly payment. In PERS 1 and TRS 1, member contribution rates are fixed by statute at 6% of pay. Thus, when contribution rates fluctuate due to a change in the amortization period, it is the employer contribution rate that is adjusted.

The original gain-sharing legislation provided that an amount equal to one-half of the extraordinary investment gains would be used to shorten the amortization period for unfunded liabilities in PERS 1 and TRS 1. This provision of the original gain-sharing legislation was codified in RCW 41.45.060(5). In 1998, the unfunded liability amortization period was rolled back from 2024 to 2022. In 2000, the amortization period was rolled back from 2022 to December 31, 2016. Then in 2001, the provision requiring that gain-sharing distributions be used to pay off the unfunded liability of the Plans 1 dropped out of the law. The amortization period for PERS and TRS Plan 1 unfunded liability was extended back out to 2024.

Currently there is no legal requirement that gain-sharing distributions be used to reduce the unfunded liability of PERS 1 or TRS 1. Furthermore, the scheduled payoff date of June 30, 2024 for Plan 1 liabilities is now the same as it was before gain-sharing.

Policy Constraints

Funding policies in the Actuarial Funding Chapter

The following general funding policies have been adopted for the Washington State Retirement Systems, and are codified in RCW 41.45.010:

- 1. to continue to fully fund the Plans 2 and 3;
- 2. to fully amortize the total costs of the Plans 1 by 2024;

- 3. to establish predictable long-term employer contribution rates which will remain a relatively constant proportion of future state budgets; and
- 4. to fund benefit increases over the working lives of members so the cost of those benefits are paid by the taxpayers who receive the benefit of those members' service.

Gain-sharing was originally passed to be funded on a pay-as-you-go basis. It was expected that employer contribution rates would simply be kept higher during those times when they would otherwise be going down in response to favorable market returns. Also, the pay-as-you go approach was favored because of difficulties in projecting future gain-sharing events and their attendant liabilities.

Because future gain-sharing benefits have not been pre-funded, gain-sharing may be viewed as inconsistent with the above funding policies. With respect to policy #1, gain-sharing has a significant cost that is not reflected in current employer contribution rates. To that extent it may be said that the Plans 3 are not fully funded. Policy #2 calls for the unfunded liabilities of the Plans 1 to be paid off by 2024. To the extend that gain-sharing provides for permanent future benefit increases that have not been pre-funded, there is the possibility that future gain-sharing would create additional unfunded liability, thereby extending the pay-off date. With respect to policy #3, we know that future gain-sharing events will occur irregularly during the future due to market volatility. If gain-sharing benefits are not pre-funded, then employer contribution rates will be adjusted to accommodate gain-sharing benefits only in response to market fluctuations. It may be said that this type of funding is not predictable or systematic. Finally, due to the unpredictability of gainsharing events, some generations of taxpayers may be benefitted by gainsharing distributions more than others, while some may be burdened more than others. If so, the gain-sharing program would be inconsistent with policy #4.

Parity among plans

RCW 41.50.005(1) sets forth as retirement policy that the retirement systems of the state shall provide similar benefits whenever possible. The application of gain-sharing to members is currently very different for the Plans 1, the Plans 2 and the Plans 3 of the Washington State Retirement systems. When gain-sharing distributions are triggered, members of PERS 1 and TRS 1 receive permanent increases through the Uniform COLA, while Plan 3 members receive

lump sum distributions into their defined contribution accounts. Plan 2 members to not participate directly in gain-sharing. Theoretically, they participate indirectly by having their contribution rates adjusted (along with that of their employers).

In the Plans 1, members have no control over their contribution rate, which is statutorily set at 6%. In the Plans 3, which are hybrid plans, members decide (from six options) how much they will contribute to the defined contribution portion of their plan. (The Plan 3 defined benefit is employer-provided.) In the Plans 2, member contribution rates change to reflect the cost of the plan.

Theoretically Plan 2 members, like employers, can enjoy lower contribution rates when economic times are good. However, since Plan 2 member contribution rates change to reflect the cost of the plan, their contribution rates are also subject to increase when economic times are bad. In other words, Plan 2 members are sharing in both gains and losses, which offset each other over time under a reasonable set of actuarial assumptions. This is in direct contrast to gain-sharing for members of the Plans 1 and 3, who receive permanent benefit improvements without participating in the offsetting losses.

Federal Law Constraints

Final regulations were effective June 15, 2004 concerning required minimum distributions under Internal Revenue Code Section 401(a)(9). Under these rules, tax benefits that were given during a participant's working years are recaptured from pay-outs during the retirement years. Generally, the rules limit the ability to avoid taxes by "back loading" annuities to pay less in the early years of retirement. In particular, the regulations permit increases in payments solely to reflect better-than-assumed investment performance, e.g. gain-sharing. However, there are specific requirements related to the measurement of actuarial gains from investment experience. These requirements should be reviewed with tax counsel to assure on-going compliance with Section 401(a)(9).

Private Sector Models

In the private sector, many companies provide what is known as "profit sharing." With profit sharing, a company establishes a target profit level. If actual profits exceed the target, then a percentage of the excess is divided

among employees. There are several types of profit sharing plans: current distribution (cash) plans, deferred payout plans and combination plans. Under current distribution plans, a profit sharing bonus is paid in cash or in shares. Under deferred payout plans, the profit sharing amount is placed in trust for later payment at termination or retirement. There are also combination or hybrid profit sharing plans that use elements of both current distribution elements and deferred payout elements.

Another form of profit- or gain-sharing is to grant bonuses to employees who generate ideas or take actions that result in cost-savings for their employer. These programs have been used more in the private sector, but have also been used in the public sector to promote government efficiency, for example in Baltimore County, North Carolina and Washington.

Gain-sharing is relatively new in the public sector. According to a nationwide survey by Fox, Lawson & Associates, fewer than 6% of public sector organizations in the United States, from school districts up through state-level organizations, had implemented a gain-sharing program in 1997. This may be explained, in part, by the fact that governmental retirement systems are not funded to generate profits. Public retirement systems are typically funded so that the liabilities of member benefits are completely funded over the working lifetime of the members. If there is a surplus then taxpayers and members have paid too much. If there is unfunded liability that is too large to be amortized over the working lifetime of the members, then taxpayers and members have paid too little. Actuaries assist employers in setting contribution rates that are adequate to address the long-term liabilities of the system.

Cost-sharing

If gain-sharing is not really about sharing in "gains" or "profits," then why do we have gain-sharing? In the context of the Washington State Retirement Systems, gain-sharing is more about cost-sharing than profit sharing. When employer contribution rates are coming down, members with fixed contribution rates may receive benefit improvements in order to share in the reduced costs. Since such members are unable to experience reduced contribution rates based on variations in the market, they can receive benefits improvements of equivalent value.

Conversely, however, when employer contribution rates are going up, Plan 1 and Plan 3 members do not share in the increased costs (or experience plan "losses") for two reasons: first, their contribution rates are fixed, and secondly, as a general matter, permanent benefit increases cannot be subsequently reduced. Therefore, in the Plans 1 and 3, the employer covers all "losses" or increased costs. The contribution rates of Plan 2 members, on the other hand, are subject to increases to cover increased liabilities. Plan 2 members share in both reduced costs and increased costs.

Comparison with Other Retirement Systems

A review of the websites and handbooks for Washington's ten comparative retirement systems revealed three states that have adopted gain-sharing provisions: Colorado, Idaho and Minnesota. In addition, the Retirement Committee for the California Teachers' Association State Council had "gain-sharing ad hoc benefit for retirees" on its list of legislative priorities in 2000 and 2001, but it dropped off the list in 2002. Other systems outside Washington's comparative systems that have enacted gain-sharing (or similar) provisions include Arizona, Louisiana and New York City. The approaches of these systems differ considerably. The following discussion summarizes the gain-sharing experience in several jurisdictions.

Arizona

Arizona passed legislation creating a "Permanent Benefit Increase (PBI) COLA for retirees of the Arizona State Retirement System. Under the PBI, a portion of the investment returns, as measured on the actuarial value of assets, that exceeds 8% is "used" for retiree COLAs. If the retiree liability is one-third of the total liability, then one-third of the excess is "available" for the PBI. The retiree COLA's are paid whenever there is enough "set aside" to fund them. An enhanced PBI COLA is paid to those who retired with a minimum of ten years of service credit and have been retired for five or more years. The intent of the enhanced PBI is to help offset the cumulative effects of inflation since retirement.

The retirement system built up a large reserve in the late 1990's and has been paying 4% COLAs to most retirees since then. However more recently, due to poor investment returns, it is estimated that the reserve will be depleted within the next couple of years. At that point, no COLAs will be given until actuarial

returns exceed 8% again. The cost of these benefit increases (COLAs) is added to the existing liabilities of the retirement system. There is no direct recognition of the PBI feature in the actuarial assumptions.

Colorado

Gain-sharing for members of Colorado's Public Employees' Retirement Association (PERA) was designed to allow employees and retirees to share benefits when the retirement plan is over-funded. 50% of over-funding went to active members in the form of a match to contributions to the 401(k) optional plan or to some other employer-sponsored tax-sheltered vehicle. The "Matchmaker" program for active members involved a dollar-for-dollar match of up to 1% of pay. Gain-sharing was also distributed to retirees as a contribution to the heath care trust fund where it could be used to finance increases in a health care subsidy provided to retirees. Matchmaker was suspended by the legislature this year. The Colorado legislature also reduced contributions to the health care trust this year by .08%. Coincidently, the legislature has adopted a plan to gradually increase employer contributions from 9.9% to 12.9% in 2012.

Idaho

The Public Employee Retirement System of Idaho (PERSI) adopted a gain-sharing program in 2000. As part of the program, PERSI established the Choice Plan, a defined contribution (DC) plan for active members. Gain-sharing distributions to active members would be deposited into their DC accounts and retirees would receive a 13th check. PERSI paid a gain-sharing distribution of \$155 million to members, retirees and employers in 2001. State employers, however, were directed to return 80% of gain-sharing to the state's general fund; 20% was to be used for training. Other employers used gain-sharing as they saw fit.

Today Idaho is in the process of increasing contribution rates. The increases are being phased in over a three- year period ending in 2006. These increases will bring contribution rates back to their 1997 levels.

Louisiana

Louisiana established an "experience account" to be credited with 50% of the retirement system's net investment experience gain and debited for 50% of the system's net investment losses for each year. The retirement board was required to grant cost-of-living adjustments (COLAs) when the experience balance was sufficient to fund the COLA in full.

The State of Louisiana's Legislative Actuary recommended that the experience account be viewed merely as a temporary holding account, emphasizing that "it does not fund COLA benefits." That is because the earnings held in the account are needed to meet the actuarial assumed long-term average return. He asserted that the experience account was just a measuring device that the state could use to grant COLAs.

As explained by Louisiana's actuary, COLAs create an additional benefit liability that increases the unfunded accrued liability. He also pointed out that the key to ultimately achieving the expected return is that all investment income is credited to the asset base from which it is derived. If income is diverted for other purposes the assumed rate will not be achieved. This in turn destroys the required match between future benefit payments and assets available to pay for them. For that reason, the Actuary recommended that additional contributions be made to restore the funding balance between future assets and liabilities, and that contribution rates be independent of the experience account's "interference." See State of Louisiana Legislative Audit, July 2002. The estimated cost of "pre-funding" the Louisiana COLAs was approximately \$2.2 billion for teachers and state employees.

Minnesota

The Minnesota State Retirement System (MSRS) currently provides two types of post-retirement adjustments: 1) a cost-of-living adjustment and 2) an investment performance component. Minnesota's gain-sharing is triggered when investment gains averaged over a five-year period exceed a specified amount - that is, the amount to cover the cost-of-living adjustment increase and the 6% return required to pay for the base benefit. This means that the cost-of-living component is pre-funded but the investment component is not.

According to the MSRS Handbook, the Minnesota's gain-sharing mechanism resulted, on average, in about a 7% increase in monthly benefits each year over the last 12 years. Now Minnesota reports problems since markets have fallen. It is expected that future post-retirement increases from the investment component will be substantially lower than those paid over the last few years. The increases for the next several years are projected to likely match inflation, up to 2.5%. Minnesota's Member Handbook states: "Unless the stock market rebounds dramatically, there will not be an investment component [to provide for increases after retirement]."

New York City

The New York City Employees' Retirement System (NYCERS) experimented with a gain-sharing mechanism referred to as "skimming" in order to improve retirement benefits for corrections officers. The benefit was to be funded with a portion of the earnings generated through NYCERS' equity investments. Excess earnings would be "skimmed" and put into a separate fund. The assets and earnings of this separate fund would be used to pay for the additional retirement benefits. In effect, excess earnings were moved from one "pot" to another, effecting a "cap" on earnings. As discussed earlier in this paper, a cap on earnings increases the need for higher contributions in the future.

When skimming was first proposed, there was some debate about the fiscal impact of skimming. The city's chief actuary estimated that the plan could cost \$68-130 million annually in increased pension contributions using a net present value approach that discounted all future added benefits plus foregone investment income to its present value. The City Council estimated a cost of \$6 million in 2000 rising to \$75 million by 2009, and continuing to increase thereafter, using a "pay-as-you-go" approach that reflected the costs of the skim as they would occur on a year to year basis. That is, the city's contribution would not reflect any of the cost of expected future payments or NYCERS earnings foregone as a result of those payments.

Skimming passed, but was later repealed and replaced with a benefit of equivalent value.

Conclusion

Gain-sharing is a mechanism for triggering benefit enhancements. It is not a funding mechanism. The benefits that are distributed when there is a gain-sharing event are part of the liabilities of the affected pension plans and must be paid for just like any other benefit enhancement. Gain-sharing was initiated in response to the favorable market conditions of the late 1990's. Since the extraordinary gains of that period were spent for benefit enhancements, those gains were not available to offset the market losses that followed. Thus future contribution rate increases must respond not only to recent market losses, but also to the ongoing liabilities for benefit enhancements associated with gain-sharing events.

Gain-sharing experience over last five years has not been consistent with its original goals, nor is it consistent with the current policies codified in the actuarial funding chapter. The gain-sharing program is founded on a "pay-as-you-go" philosophy, while long-term funding objectives for the retirement systems at large utilize systematic actuarial pre-funding.